



April 2000

Inside this Issue

- 1** Director's Corner
- 2** Updates From ITSC Teams
 - * Application Software Development & Support
 - * Web Team
 - * Telecomm Team
 - * NPIRS
 - * Systems Management
 - * Self-determination Services
- 3** The GCPR Framework
- 4** Palermo II Meeting
- 5** Seat Management
- 6** ITSC Call Center Update
- 7** Spotlight on Juan Navarro
- 8** Events and Training Opportunities
- 9** We'd like to hear from you!

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Information Technology Support Center
Division of Information Resources
Indian Health Service

ITSC News

IHS Information Technology Support Center

Director's Corner

Russell Pittman

Annual Conference

The **2000 Information Technology & Program Support Conference** is being held in Albuquerque, NM on June 5-9, 2000. The conference theme this year is "Leveraging Information Technology and Strategic Partnerships to Improve Business Practices." There are five course tracks: Training, Data Quality, Emerging Technologies, Security, and Business Operations. June 5th and 9th are scheduled for hands-on training, travel and Information System Coordinator, Professional Standards Groups, and Business Office meetings. The opening session is on June 6th, and features nationally recognized speakers on process improvement, motivation, security, information technology, and business operations. Vendor exhibits and booths are open June 6-9.

Strategic Partnerships

This year, the Division of Information Resources has expanded our strategic business partnership arrangements with Private Sector and Government Agencies. These partnerships will allow the ITSC to leverage the

knowledge and software of these organizations to quickly enhance the way RPMS is used for business operations. These partnerships include Envoy (for Insurance Eligibility Verification, Electronic Billing, Clearing-House functions, and Electronic Explanation of Benefits posting), Informatix (for customizable Primary Care Component worksheets, and Accounts Receivable functionality), and TransWorld (for Debt Collection). We are also aligning RPMS more closely with the Department of Veteran's Affairs (DVA) VISTA software suite. This will allow for greater sharing of already developed VA software systems and increased functionality for the RPMS suite.

RPMS Growth Path and Project Plan

The RPMS Growth Plan, developed with consultation with Professional Standards Groups, Information Systems Advisory Council, top management, and program officials, documents the customer expectations and development schedule for RPMS over the next five years. The plan includes annual goals, specific interfaces and functionality, and the use of GOTS and COTS products.

The ITSC Year 2000 Project Plan has been reviewed by the Information Systems Advisory

Committee and revised according to their input. The plan now includes specific timelines, deliverables, costs, and task lists. This plan makes it much easier for a specialty group or facility to determine if a desired enhancement is planned for the next version of software.

The RPMS Growth Path and Annual Project Plan together provide a framework for requesting resources, prioritizing software/hardware development, and leveraging products from our strategic business partners. These living documents also allow our customers and staff to have a common vision of the future of our clinical information systems. For more information please go to home.ihs.gov/isac/plan.html.

Updates from ITSC Teams

Application Software Development and Support Ray Willie/Carl Gervais



There has been significant activity on RPMS applications since the last newsletter:

Accounts Receivable V1.2

This version includes a Flat Rate Posting option. This option makes it possible for you to post multiple payments for outpatient visits in batches. The payments in a single batch must have a common amount, the same adjustments, and result in the

same write-off amounts. You can also edit unposted batches (i.e., add or remove payments, add adjust-ments), view posted and unposted batches, or cancel one.

Third Party Billing V2.4

This version includes the electronic HCFA-1500-E mode of export. It supports multiple location billing, allowing for billing for services provided at locations not already set up within the system as satellites.

Immunization V.7.0

The new IHS Immunization application, developed at the Alaska Native Medical Center, is available. It is developed from design requirements created by a national team of IHS field staff. Now you can:

- Forecast due dates using the latest HL7/ CVX codes.
- Profile patient immunization history and forecast.
- Export immunization data for transmission to other programs or databases.
- Present vaccine-specific and vaccine-combination reports for two-year olds.

Obstetrics Patient Tracking System

The IHS Obstetric Patient Tracking System Software Package Version 1.0 tracks prenatal patients from their first prenatal visit through their postpartum checkups. It stores clinical data related to a woman's pregnancy and delivery, and provides a view of the patient's entire electronic record. If your laboratory package feeds into the

Patient Care Component, you can establish links between lab results and the appropriate risk factors. With other RPMS applications installed, you can view the patient's PCC Health Summary, order a Radiology exam, make an appointment, view progress notes, and admit the patient from anywhere in the record.

ARMS 1099 Rewrite

ITSC developers have rewritten the 1099 document generation process in the ARMS application because the former 1166 IRS/1099 Menu belonged to the obsolete 1166 Approvals for Payment software package. Portions of the software have also been modified to make it more user friendly.

CORE Open Document Download

Under the former HHS Health Accounting system, Areas were able to obtain a download of open document data in the form of a SHR-424 or SHR-426 HAS UNIX file report which could be uploaded into the Open Document file and used as a commitment register. With the transfer to the new CORE accounting system, this report is no longer available.

Several software routines and the Open Document database have been modified to accommodate the new CORE data format and to distinguish between the HAS data and CORE data.

Average Wholesale Price (AWP) Quarterly Updates

The quarterly Average Wholesale Price (AWP) updates from First

Data Bank available for general distribution for all IHS pharmacy customers. These releases ensure that accurate tracking of drug costs can occur, while increasing the chances of proper reimbursement from third party payers.

Web Team

Len Thurman

With Y2K issues behind us, many IHS, Tribal, and Urban programs and employees have turned their attention to web projects. During February alone, the Web Team received twelve new requests to create web sites. Five of the requested sites involved real time database access plus simple web pages. In addition, negotiations were completed to implement another new, highly complex web site being developed by an outside contractor. Eight new pages or sites were launched during February alone.

New IHS Intranet Web site

Early this year we rolled out a redesigned agency Intranet web site, available at home.ihs.gov. The new site represents a complete face-lift and a re-engineered back-end server structure. The site merges two previous Intranet sites: *home.ihs.gov* and *home.hqw.ihs.gov*. The result is less redundant information, site-wide navigation and cross-linking, and fewer servers and directories. Now customers can access online phone and e-mail directories; property and supply listings; calendars and other events; links to IHS departments and programs; documents, links and other web resources;

discussion groups; and project planning and reporting.

Server-side technologies include Active Service Pages (ASP), FrontPage extensions, and Cold-Fusion while client-side processing is performed with JavaScript and Java applets.

Browser capabilities now use style sheets and advanced scripting, cross-links between agency Internet and Intranet content, an integrated search facility, and "hooks" for the IHS portal project.

In addition, the Intranet headers and footers are simple to use and allow developers to customize colors for continuity among page designs. Details of these options are available through the Intranet Web Developer Help page at (home.ihs.gov/GeneralWeb/HelpCenter/web/index.asp).



Telecomm Team

Tom Fisher

Virtual Private Networks

We now have two virtual private networks (VPNs) in operation, allowing us to interact with FTS2001 MCI and with the G-CPR project. Both VPNs are accessible from the National Programs office (formerly HQW) in Albuquerque.

FTS2001

We have completed assigning all IHS federal calling cards under

the FTS2001 MCI service. The conversion from FTS2000 to FTS2001 MCI will be fully completed by June 30.

Internet Security

We have been studying network firewalls, the devices that provide security against inappropriate access from the Internet to internal network locations. As a result of our research, we have purchased Alcatel firewalls that have recently been delivered. Staff are receiving the necessary training and planning the installation process. Previously, entry from the Internet has been controlled through the use of an access list based on the type of incoming service and point of origin. The new Alcatel firewall actually checks each incoming data packet and determines if that packet should be allowed into the IHS network.

Network Monitoring

The ITSC has implemented a 24 x 7 network monitoring system that watches the firewall, Internet pages, and the backbone network (consisting of the 12 Area offices, CRIHB and headquarters offices in Rockville and Albuquerque) for operational readiness. Detection of a failure activates a pager to the on-call member of the Wide Area Network team. The network uptime monitoring system (<http://161.223.91.151>) can be accessed via the web. You can also view any of the 12 Area graphical maps.

For network performance monitoring, we continue to use the Multiple Router Traffic Grapher (MRTG), a tool that monitors the bandwidth and

traffic load on network links (home.wan.ihs.gov).

NPIRS

Stephanie Klepacki

Help Desk

The National Patient Information Reporting Systems Help Desk is operational! In fact, it has been up and running since January 19, 2000. It's your one-stop shop for questions, comments, and concerns about any of the central databases (NPIRS, NECOP and STORES). This includes reporting any problems that may exist and/or any enhancements you would like to request.

The NPIRS Help Desk uses a task tracking system to ensure your request does not "slip through the cracks" -- so we **STRONGLY** encourage you to use it (instead of contacting your favorite busy/forgetful person). Please help us to help you. You can contact us using 'NPIRS HELP' on the IHS mail system, or NPIRS.HELP@mail.ihs.gov, or call us at (505) 248-4160/4147. Your request will be assigned to the appropriate person, and you will receive a response containing their name, phone number, and a task number. Please make a note of this information and mention the task number in any subsequent correspondence on the subject.

NECOP

Automatic processing of the monthly database updates was implemented for each month since January. An average of 8 out of 14 sites regularly submit their data, and it is being successfully processed.

NECOP reports are now available from the NPIRS web page (dpsntweb1.hqw.ihs.gov/ciweb/main.html). Training is also available for users on how to access their reports.

STORES

Five out of six sites have submitted their data from the new SAMS Version 4 since the beginning of the fiscal year.

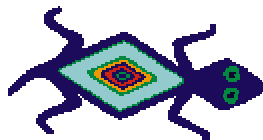
Reports are now available from the NPIRS web page (see URL under NECOP).

PHN

Sandra Dodge, R.N., M.S.A., M.S.N., Office of Public Health, is the new PHN consultant. She is currently working with the Data Center to develop PHN reports.

ORYX/GPRA

Special extract files have been processed for four of the site indicators for the GPRA activities.



Systems

Management Team

Mark Delaney

About Windows 2000...

The team attended the Windows 2000 Connections Conference in Phoenix. This was an excellent source for information about Win2K. An additional day, May 4, was scheduled for IHS Win2K planning at the Phoenix Area office for those IHS people who

are implementing Win2K in their Areas.

Dr. Delaney has assembled a list of issues concerning Win2K discussed at the recent ISC meeting. He has made this available at: smt.hqw.ihs.gov/Smt/WIN2K/WhyWin2k.htm.

The SMT is testing and evaluating Windows 2000 for implementation IHS-wide. We already have Windows 2000 Professional on many of our desktops and have a Windows 2000 test domain in place. As we learn more about the new OS, we will be posting new information at the following web site: smt.hqw.ihs.gov/smt/smtstart.htm. Be sure to stay tuned for the latest updates!

Mark Delaney and Rick Pullen helped the Shiprock IT crew port the RPMS environment to two Dell servers running Windows NT 4. They are testing Lexmark printers as replacements to the Zebra label printers. The process went smoothly with almost no glitches encountered.

New Lower Prices For Large Systems Contract

IBM significantly lowered their pricing on their RS6000 line recently and these lower costs are being passed on to us by Severn via the Large System contract. Here is the new pricing according to Roy Jackson from Severn:

Prices have been reduced on CPU chips, disk drives, and some memory items. IBM announced that it no longer charges a "per user" fee for AIX licenses. All RS/6000 systems now come with an "unlimited" user license of AIX

with no increase in the base price of the system. In addition, IBM now considers all installed AIX licenses as unlimited. These changes reduce the price of our Class I (and II) systems - the F50. Our reduced prices are as follows:

- Large System Contract price for a Class I System (CLIN 0001H) is now \$31,125 (formerly \$39,950)
- Large System Contract price for a Class II System (CLIN 0002H) is now \$62,250 (formerly \$79,900)
- There are no changes to the system configuration.
- Expansion kits (memory and disk) have also been reduced. Upgrade pricing for the latest version of the AIX operating system (4.3.3) will also be substantially less.

Self-Determination Services Team

Bruce Parker

Approximately 10% of the nearly 600 tribes and tribal organizations in this country have been approved for Title III compacting in FY2001. With this approval the next step, taking place now, is the negotiating of Annual Funding Agreements (AFAs) with each of the compacting organizations.

The role of IHS is to serve as an advocate for tribal self-determination and to assist tribes who wish to manage their own programs. The SDST team is serving as facilitators of the process. Team members worked

with all parties involved to clarify the Division of Information Resources (DIR) activities. They also assembled information that supports negotiations including detailed DIR functions and services, DIR-related Tribal shares, a DIR negotiators guide, Q&As, and several scenarios that may be applicable to I/T/U needs. In addition, the SDST put together information that supports DIR and I/T/U contracting/compacting activities.

The IHS DIR has produced an infrastructure document that categorizes the functions and services it provides and the costs associated with each. This document serves as the basis for tribal selection and the amount of share dollars that ultimately goes to the individual tribes and/or are retained by the IHS.

The GCPR Framework

Linza Bethea

Since January 1998, IHS has participated with the Departments of Defense (DoD) and Veterans Affairs (DVA) in the Government Computer-based Patient Record (GCPR) Program, a federal interagency health care technology initiative. The goal of the GCPR Program is to improve public and individual healthcare by using *existing* technology to share patient health-related information within or across agencies in a secure manner.

The IHS, like other healthcare organizations, has rapidly

expanding needs for electronic interfaces between RPMS and other internal and external systems. The main strategy that agencies, including IHS, are taking to enhance interoperability is the widespread use of message-based inter-application and inter-site communication and data exchange. IHS participates in the GCPR Program in order to extend and leverage its limited resources to achieve interoperability more quickly.

The GCPR Framework is a collection of enabling technologies that allow for the sharing of information, regardless of the application used. The Framework relies heavily on open architecture and standards-based COTS products, which in turn interface with existing agency systems. The Framework is based on a distributed object-based architecture, the Common Object Request Broker Architecture (CORBA®) standard.

By establishing common information and terminology models, and providing tools to capture, report, and exchange data even when defined differently in individual agency systems, the GCPR Framework enables information to be presented to clinicians without the need for translation by the receiving side.

DIR staff has participated in defining and assessing the Framework technology and models and is currently evaluating the Framework prototype, which, if successful, will move the project into the development of a pilot system.

For further information, contact George Huggins, IHS Technical Lead, (520) 670-4871 or go to www.gcpr.gov.

Palermo II Meeting

Stephanie Klepacki

Planning for Future Data Access

The Data Center and the National Indian Council on Aging (NICOA) recently co-hosted the Palermo II meeting in Albuquerque. The meeting united the agencies involved in the collection, processing, and reporting of Indian health data to accomplish the following objectives:

- Review the steps required to collect, process, and/or report patient data at all levels (i.e., Service Unit, Area, and National).
- Discuss problem areas and identify potential solutions.
- Receive a status report from the User Population Workgroup that was tasked with determining what constitutes a duplicate patient record and the procedure for correcting the situation.
- Review how the national data is provided to and used by other, separate applications and programs.
- Receive a report from the ISAC meeting held February

23, 2000, including recommendations for improving data quality.

- Provide training for using reports from the NPIRS web page, discuss IHS requirements for online reports, and identify additional necessary reports.

Ms. Edna Paisano, Principal Statistician and Team Leader for Program Statistics, facilitated the meeting. About 40 people attended from 11 Areas, IHS Rockville, NICOA, and ITSC. The importance of improving data quality was discussed numerous times. A key development was ISAC's recommendation that the IHS Director appoint an interim Data Quality Leader who would identify, document, and coordinate data quality projects at Headquarters, Areas, and programs.

The Palermo III meeting is tentatively scheduled to be held in August. For additional information, contact Ms. Edna Paisano at (301) 443-1180 or email her at epaisano@hqe.ihs.gov.

Seat Management

Jackie Atauvich/Joan Christy

Seat management is a contract method of purchasing software, support, and/or network management by paying a fee for each computer or "seat" you wish to cover. This method allows for the fixed pricing and therefore provides a known cost for the complete life-cycle support

services for the desktop/server computing environment.

Although Seat Management contracts and offerings differ among their providers, outsourcing desktop and networking support holds some interesting potential. It can improve services, provide better contract manageability, reduce costs of acquisition and disposal, equip your staff with the latest in technology, and make it easier to understand, manage, and predict IT costs.

Seat management services are available for federal agencies under three sources: two contracts under the Federal Computer Acquisition Center (a GSA contract and a Federal Data Corporation/NASA, ODIN contract) and one contract under the Center for Information Technology (CIT). IHS/Rockville is using the CIT contract under the National Institutes of Health."

Since ITSC is currently deploying the Office 2000 suite of applications, we will defer our entry into a seat management program until the time when software upgrades are appropriate.

ITSC Call Center Update

Len Kulleseid

The Call Center began the year with 164 open trouble calls being worked by developers. Since then they have received 344 new trouble calls and closed 425.

Sample Staff Activities

The Call Center staff does more than just receive and log trouble calls, send them to appropriate developers, and follow up on their resolution. They are very often able to resolve the issues themselves. For example, one staff member developed a routine to assist one of the sites in recovering lost records in one of the applications. On another occasion, he tracked down and resolved a problem with an application that caused it to crash at a site when attempting to run exports.

Spotlight on **Juan Navarro**



Juan Navarro has recently been cited for providing outstanding service to the Indian Health Service. Both as an employee and, most recently, as a Uniband contractor, Juan has been verifying and validating RPMS software for over seven years. Verification and Validation (V&V) is a key element in the software

development process, one that often goes unnoticed and is generally under appreciated. The V&V person has to give what is often tedious attention to detail to ensure that all software is of the highest quality and meets all software development standards. One of two IHS V&V specialists, Juan reviews and verifies RPMS software using the IHS Programming Standards and Conventions. This detailed review addresses three aspects of an application package, including its functionality from the user perspective, its technical design and construction, and accuracy of all its supporting documentation. V&V reviews take place at various stages, including Preliminary, Beta, Gamma, and Final release. After finishing the necessary reviews, Juan completes certification of the software and its documentation, and makes the package available to all designated sites.

Juan and his V&V colleague, Albert Toya, reviewed 95 software releases in FY1999, primarily in preparation for FY2000, representing a substantial increase over normal annual workloads. They coordinated their Y2K renovation efforts with an independent contractor, which was an additional requirement in the regular V&V process. The results of their efforts were underscored during the calendar year rollover when there were ZERO reported errors for the RPMS applications.

Juan's background in computer programming and system analysis extends back to the early seventies. Most of that experience

has been in the medical community, including stints with William Beaumont Army Medical Center in El Paso, Texas, and Walter Reed Army Medical Center, Washington D.C. At William Beaumont, he planned, developed and designed programs and interfaces associated with laboratory instruments and sub-systems. At Walter Reed he designed and developed requirements for clinical laboratory and radiology computer systems. He also evaluated the delivered products.

Juan and his wife, Annabelle, live in Rio Rancho and have raised four children who are now all living in different areas of the country.

Events and Training Opportunities

For training classes calendar/on-line registration, refer to the new ITSC training web site home.training.ihs.gov or the RPMS training page accessed from www.ihs.gov/Cio/RPMS. These sites have information and links to training offered by the Phoenix Area, California Rural Indian Health Board (CRIHB), Northwest Portland Area Indian Health Board/Portland Area IHS (NPAIHB), and ITSC.

June

6/5-9/00 -- 2000 Information Tech-nology & Program Support Conference, Crown Plaza, Albuquerque.

(www.ihs.gov/TechConf2000)

6/12-14/00 -- Third Party Billing, NPAIHB.

6/13-16/00 -- FileMan for Users, ITSC, Albuquerque.

6/14-16/00 -- Accounts Receivable, NPAIHB.

6/14-16/00 -- Third Party Billing for Users, Phoenix Area.

6/15/00 -- Patient Generator/Visit Generator Reports, CRIHB.

6/19/00 -- Account Management /Collections, ITSC, Albuquerque.

6/21-23/00 -- Diabetes Mgmt System, NPAIHB.

6/26/00 -- Referred Care Information System, CRIHB.

6/27-28/00 -- Patient Registration (Billings Area Only), ITSC, Billings.

6/27-28/00 -- Dental Data System, NPAIHB.

6/27-30/00 -- Contract Health Management Information System, CRIHB.

July

7/11-13/00 -- PCC Outputs Reporting, NPAIHB.

7/18-19/00 -- Women's Health, NPAIHB.

7/18-19/00 -- Patient Registration, ITSC, Billings.

7/24-25/00 -- Third Party Billing /Accounts Receivable for Managers, ITSC, Albuquerque.

7/25-26/00 -- Contract Health System, NPAIHB.

7/26-27/00 -- Third Party Billing for Users, ITSC, Albuquerque.

7/27-28/00 -- Referred Care Information System, NPAIHB.

7/28/00 -- Accounts Receivable for Users, ITSC, Albuquerque.

August

8/1-2/00 -- Patient Registration, ITSC, Albuquerque, NM.

8/8-9/00 -- Patient Registration, Phoenix Area.

8/14-15/00 -- Third Party Billing /Accounts Receivable for Managers, ITSC, Aberdeen.

8/15-17/00 -- PCC Diabetes Management System, ITSC, Albuquerque.

8/16-17/00 -- Third Party Billing for Users, ITSC, Aberdeen.

8/18/00 -- Accounts Receivable for Users, ITSC, Aberdeen.

8/18/00 -- PCC Data Entry for Diabetes-specific Data, ITSC, Albuquerque.

8/22-24/00 -- Scheduling using the MAS package, ITSC, Albuquerque.

8/28/00 -- Account Management /Collections, ITSC, Albuquerque.

We'd like to hear from you!

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